STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	**)**	
	)	
	)	**ICC Docket No. 13-0495**
Approval of the Energy Efficiency and	**)**	
Demand Response Plan Pursuant to	**)**	
Section 8-103(f) of the Public Utilities Act	**)**	

DRAFT PROPOSED ORDER
ON BEHALF OF THE
MIDWEST COGENERATION ASSOCIATION

The Midwest Cogeneration Association ("MCA") respectfully submits its Draft Proposed Order of the Commission in this proceeding, as such Commission Order may pertain to programs which incentivize energy savings from Combined Heat and Power and Waste Heat-to-Power technology (collectively referred to herein as "CHP") in the Commonwealth Edison ("ComEd") Energy Efficiency and Demand Response Plan.

INTRODUCTION/ STATEMENT OF CASE

The goal of the Midwest Cogeneration Association ("MCA") in this proceeding has been to explain the energy efficiency benefits of CHP technologies, to underscore the unrealized potential for CHP project development in Illinois and the barriers it faces, and to suggest to the Commission how the programs within ComEd's Energy Efficiency and Demand Response Plan for years 2014-2016 ("Plan 3") can be designed to incentivize CHP project development.

SUMMARY OF POSITIONS AND EVIDENCE ON CHP

Only three parties to this proceeding have addressed CHP: MCA, ComEd and REACT. Their positions are as follows:

MCA's POSITION

1. The Direct Testimony of MCA witness Richard Munson, a nationally recognized CHP energy efficiency expert, author and CHP project developer. (MCA Exhibit 1.01) Mr. Munson's testimony makes the following key points (pp. 3- 8):

a. CHP technologies should be included in the ComEd Plan – and every other Illinois utility's energy efficiency plan – because they offer a cost-effective way to produce reliable, distributed base-load electric generation far more efficiently than conventional centralized power generation and with far fewer emissions.

b. With conventional centralized power production, roughly two-thirds of energy inputs are sacrificed as wasted heat and line losses. Because CHP simultaneously produces both heat and electricity from a single fuel source, this inefficiency is "turned on its head" – achieving efficiencies of 60 to more than 80 percent.

c. An on-site CHP system sized properly for a facility's thermal load can provide both electricity and thermal energy at efficiencies of 60 to more than 80 percent versus the combined efficiency of the conventional method of separate heat and power, which is approximately 40-45 percent.

d. Having CHP and WHP technology expressly included in Commonwealth Edison's portfolio of eligible energy-efficient technologies will result in an array of benefits for the Illinois electric grid and for Illinois energy consumers, including:

- Energy savings system-wide, resulting in lower costs to Illinois consumers;
- Reductions in peak demand, resulting in fewer "black outs" and "brown outs" and less need to build new and expensive power plants to meet consumer requirements;
- Reduction in "line losses" due to the "distributed" nature of CHP and WHP systems (Line losses average 7 percent and can reach 20 percent during periods of peak demand.);
- Reduction in load on existing transmission and distribution lines and reduced need to repair and build new lines, again due to the distributed nature of CHP and WHP systems;
- Lower emissions of greenhouse gases, criteria pollutants (such as NOx, SO2 and PM), and hazardous air pollutants;
- Job creation and increases in Illinois' manufacturing competitiveness; and
- Increased energy resiliency during natural disasters and other emergencies due to the distributed nature of CHP and WHP systems. (I note that the Illinois Energy Assurance Plan, adopted just this past summer, includes distributed CHP and WHP systems as elements of the state's energy resiliency planning.)

e. CHP technologies should be expressly recognized as eligible energy efficiency measures within ComEd's custom programs. CHP is often a great fit for larger industrial customers looking to save energy. Out of the 82.4 GW of CHP capacity currently in the United States, 87% resides in the industrial sector. According to ICF International's CHP database, Illinois has 1.2 GW of existing CHP capacity, but there exists 2.4 GW of unrealized CHP technical potential within Illinois' industrial sector. However, other studies have pegged the unrealized potential in Illinois at as much as 7.5 GW. Regardless of these studies' differences, it is clear that unrealized CHP potential in the State of Illinois represents an enormous opportunity to help ComEd meet its statutory energy savings goals. The Large C&I Pilot program is perfectly positioned to promote

CHP and WHP installations by larger industrial customers interested in bankable energy savings.

For those customers not large enough to be invited to participate in ComEd's large pilot program, the C&I custom rebate program offers similar savings opportunities.

f. A stand-alone CHP Pilot Program should also be included in ComEd Plan 3 stating that "providing a standardized approach for CHP projects will allow customers to plan ahead. Moreover, a well-structured CHP/WHP program could help defray first costs for host sites with upfront payments, while also ensuring system efficiency and reliability with progress payments."

2. MCA's Initial Brief which summarizes the MCA's position and the evidence in the record supporting a Commission Order which a) expressly acknowledges the eligibility of CHP projects for consideration in ComEd's custom programs, and b) orders ComEd "to evaluate a targeted CHP Pilot Program in 2014 for proposal to the Commission as soon as possible." (MCA Initial Brief, p. 3)

3. MCA's Reply Brief responds to statements repeated in ComEd's Initial Brief regarding studying MCA's proposed targeted CHP program "over the next 3 years" and underscores the need for a Commission Order directing ComEd to "expressly require ComEd to study the DCEO's pilot program and other targeted CHP programs currently being implemented in other states and to affirmatively address [ComEd's stated] issues with the gas utilities and other stakeholders and report back to the Commission with a proposal for such a program or the reason why it is not doing so." (MCA Reply Brief, p. 2)

REACT'S POSITION

The stipulated cross-examination of the REACT coalition (MCA Cross Exhibit 2.0), stating:

"Combined Heat and Power has not been the focus of REACT's testimony in this proceeding. However, based on his energy industry experience, REACT's witness Mr. Fults agrees that CHP is a well-established technology that can advance energy efficiency." (REACT Response to MCA Data Request 2.01)

and also stating:

"REACT's proposed Self-Direct Pilot Program has been the focus of REACT's testimony in this proceeding. In that context, it is REACT witness Mr. Fults' understanding that, if the Commission approves the Self-Direct Pilot Program that REACT has proposed, certain members of REACT may consider implementation of Combined Heat and Power ("CHP") and/or Waste to Heat Power ("WHP") projects that they otherwise would not consider." (REACT Response to MCA Data Requests 2.02 and 2.03)

ComEd's POSITION

1. ComEd's Plan 3 includes the following acknowledgement that CHP is eligible for inclusion in the ComEd energy efficiency portfolio:

"Public Act 98-0090 ("P.A. 98-0090") changed the definition of definition of 'Energy Efficiency' to also include 'measures that reduce the total Btus of electricity and natural gas needed to meet the end use or uses." 20 ILCA 3855/1-10. This change in definition will enable certain technologies, such as ground source heat pumps that replace gas furnaceds, as well as combined heat and power projects, to be included in an energy efficiency portfolio." (Plan 3, p.11)

2. The Rebuttal Testimony of ComEd witness Michael Brandt (p. 54, Lines 1232-1240 and p. 55-1249-1251), states:

a. ComEd didn't evaluate CHP for Plan 3 because P.S. 98-0090 did not become effective until July 2013 and it didn't have enough time to do that evaluation prior to the Plan 3 submittal deadline and

b. ComEd attended a stakeholders workshop on CHP in June 2013 and left that workshop believing that critical policy issues remained open, including "joint delivery" of a CHP program with the natural gas utilities and "mitigation of performance and evaluation risk."

3. Cross-examination of ComEd witness Michael Brandt at the December 4, 2013, at pp. 33 - 46 of the hearing Transcript. In brief, the following points were made in that cross-examination testimony:

a. Mr. Brandt agreed that CHP projects are eligible for inclusion in its Plan 3 custom programs. (Transcript, p. 36, , Lines 8 - 24);

b. Mr. Brandt stated that CHP was not evaluated by ComEd for Plan 3 solely based on timing, i.e. P.A. 98-0090 did not become effective until July 2013 and by that time ComEd's work on Plan 3 was too far along to evaluate expess inclusion of CHP. (Transcript, p. 36, Lines 16- 24 and p. 37, Lines 1-9)

c. Mr. Brandt agreed that CHP is not a "new" technology in the sense of being experimental or unproven. (Transcript, p. 45, 1-3)

d. Mr. Brandt stated the following ComEd issues must be addressed for a ComEd stand-alone CHP program :

i. Which utility (electric vs gas) can count the savings from CHP. (Transcript, p. 46, Lines 6-14)

e.. Mr. Brandt concurred that it is now appropriate for ComEd to evaluate CHP, including as a step in that evaluation, a review of other states' programs that include CHP, similar to the "Industry Research" reflected in Appendix A to ComEd's Petition in this proceeding. (Transcript p. 44, Lines 11-17.)

f. Mr. Brandt stated his belief that ComEd's stated policy issues concerns regarding CHP need to be figured out, but"…it's all doable, and I expect this measure to be a part of the portfolio." (Transcript p. 46)

g. Mr. Brandt agreed that his testimony should not be interpreted as suggesting that the process of "figuring out" how a targeted CHP program might fit within the portfolio should wait for the next 3-year plan. He stated that CHP projects can be included right now in the custom incentive programs and that discussion of a targeted CHP program should be taken up in the stakeholder advisory group with the gas companies at the table. He concurred that the stakeholder group process to review a CHP program can begin within the "near future." (Transcript pp. 45, Lines 5-24 and p. 46 Lines 1- 20)

COMMISSION ANALYSIS AND CONCLUSIONS REGARDING CHP

The MCA proposes the following Commission Analysis and Conclusions regarding CHP:

All parties in this proceeding that have addressed CHP agree that it is an eligible energy efficiency measure with significant promise for providing energy savings for the ComEd's Plan 3 portfolio. Based on the testimony provided by the parties, the Commission concurs in this conclusion.

All parties also agree that CHP projects are eligible for consideration in customized energy savings plans under ComEd's Plan 3 custom programs. Again, the Commission concurs in this conclusion.

Finally, both MCA and ComEd agree that a standalone CHP program should be evaluated within the stakeholder advisory group process in the "near future" and that such a stand-alone program might appropriately be incorporated in ComEd's Plan 3 program offerings following that evaluation. The Commission concurs in this approach

Based on the above, the Commission directs ComEd to initiate a stakeholder advisory group process to evaluate a stand-alone CHP Pilot Program and report back to the Commission within 60 days either with a proposed CHP Pilot Program template, including implementation details, or an explanation as to why such CHP Pilot Program cannot be proposed.

Date: December 19, 2013 Respectfully submitted,

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